# MULTILAYER REFLECTOR
# WITH SUPPRESSION OF HIGH ORDER REFLECTIONS


## Abstract of the Disclosure

A multilayer interference reflecting film has individual optical layers arranged to form optical repeat units throughout the film. Each of a plurality of optical repeat units has six individual layers, at least three of which have different refractive indices at a design wavelength $\lambda_0$. Individual layers having nominally the same refractive index and physical thickness, arbitrarily labeled "A", "B", "C", and "D", are arranged in a six-layer optical repeat unit in a cyclic permutation of CACDBD, where the A and B layers are each thicker than the C and D layers. The thicknesses and refractive indices of the individual layers can be selected to suppress the second, third, and fourth order reflections, while reflecting light at the design wavelength.